

Karl Gerstner:

# Designing Programmes

Programme as morphology  
Programme as logic  
Programme as grid  
Programme as photography  
Programme as literature  
Programme as music

Programme as typeface  
Programme as typography  
Programme as picture  
Programme as method

Alec Tiranti Ltd.  
London W. 1.

Instead of solutions for problems, programmes for solutions – the subtitle can also be understood in these terms: for no problem (so to speak) is there an absolute solution. Reason: the possibilities cannot be delimited absolutely. There is always a group of solutions, one of which is the best under certain conditions.

To describe the problem is part of the solution. This implies: not to make creative decisions as prompted by feeling but by intellectual criteria. The more exact and complete these criteria are, the more creative the work becomes. The creative process is to be reduced to an act of selection. Designing means: to pick out determining elements and combine them. Seen in these terms, designing calls for method. The most suitable I know is the one Fritz Zwicky has developed, although actually his is intended for scientists rather than designers. (*Die morphologische Forschung*, 1953, Kommissionsverlag, Winterthur) I have produced the diagram below in accordance with his instructions and, following his terminology, I have called it the

morphological box of the typogram. It contains the criteria – the parameters on the left, the relative components on the right – following which marks and signs are to be designed from letters.

The criteria are rough. As the work proceeds, of course, they are to be refined as desired. The components are to be made into parameters and new components are to be specified, etc. Moreover, they are not only rough, they are also not self-contained. The component "something else" is the parcel in which the left-overs are packed if the parameter does not break down neatly. The designations are imprecise in some cases. There are many imperfections. But it is precisely in drawing up the scheme, in striving for perfection, that the work really lies. The work is not diminished; it is merely transferred to another plane.

The inadequacy of this box is my own and not inherent in the method. Even so: it contains thousands of solutions which – as could be shown by checking an example – are arrived at by the blind concatenation of components. It is a kind of designing automatic.

a Basis

21

1. Components	11. Word	12. Abbreviation	13. Word group	14. Combined	
2. Typeface	21. Sans-serif	22. Roman	23. German	24. Some other	25. Combined
3. Technique	31. Written	32. Drawn	33. Composed	34. Some other	35. Combined

b Colour

1. Shade	11. Light	12. Medium	13. Dark	14. Combined	
2. Value	21. Chromatic	22. Achromatic	23. Mixed	24. Combined	

c Appearance

1. Size	11. Small	12. Medium	13. Large	14. Combined	
2. Proportion	21. Narrow	22. Usual	23. Broad	24. Combined	
3. Boldness	31. Lean	32. Normal	33. Fat	34. Combined	
4. Inclination	41. Upright	42. Oblique	43. Combined		

d Expression

1. Reading direction	11. From left to right	12. From top to bottom	13. From bottom to top	14. Otherwise	15. Combined
2. Spacing	21. Narrow	22. Normal	23. Wide	24. Combined	
3. Form	31. Unmodified	32. Mutilated	33. Projected	34. Something else	35. Combined
4. Design	41. Unmodified	42. Something omitted	43. Something replaced	44. Something added	45. Combined

### *Solutions from the programme*

(Not all the solutions were found with the aid of the morphological box. But all those found can be assigned to a place in it and analyzed.)

If all the components contained in the trademark *intermöbel* are added we obtain the following chain:

- a 11. (word) - 21. (sans-serif) - 33. (composed)
- b 14. (shades combined, viz. light and dark) - 12. (achromatic)
- c 12. (size immaterial, therefore medium) - 22. (proportion usual) - 33. (lat) - 41. (roman)
- d 11. (from left to right) - 22. (normal spacing) - 31. (form unmodified) - 43. (something replaced, viz. the face of the letter r by superimposition of the two parts of the word).

Not all the components are of equal importance; only two are actually decisive: b 14 + d 43.

The importance of combined is shown in example h 14: the components light-medium-dark are not very expressive in themselves because they do not represent an assessable value (apart from black always being dark). But if letters of varying degrees of darkness are combined (as here) the parameter of shade may be the point at which the solution crystallizes out.

Parameters as points of crystallization I will illustrate all those in the section "Expression" by the following examples:

"Reading direction" determines the expression of the typograms *Krupp* and *National Zeitung*. In both instances the component d 15 (combined) forms the basis. In *Krupp* d 11 (from left to right) is combined with d 14 (otherwise, i. e. from right to left). In the case of *National Zeitung* the components are d 12 and 13. Incidentally, the typogram for Bech Electronic Centre belongs here, see page 44.

"Spacing", once again combined in the component, is determining in *Braun Electric* and *Autokredit A.G.*

22

**intermöbel**

23

**1181 99UЯK  
KRUPP 1961**

24

**National  
Zeitung**

25

**B r a u n Electric International SA**

26

**A U T O K R E D I T**

"Form" is relevant in *Abfälle*, *Globotyper*, *wievoll?*. In *Abfälle* the component d 32 (mutilated, here fragmented); in *Globotyper* d 33 (projected, here on a sphere), in *wievoll?* d 34 (something else, the form is neither unmodified, nor is it mutilated or projected, but "something else": partly silhouetted).

The idea of "design" means something more than is conveyed by "form". To take an example: in *Auto AG*, the dropping of the crossbar of the A's cannot be called a mutilation nor a form operation either. If the form is mutilated, the components are preserved. That is not the case in this instance. The form as such is Berthold sans-serif but "something is omitted". The reverse applies to the case of *FH* (Fédération Horlogère Suisse): here "something is added": namely, the Swiss cross within the letters. In the case of *Rheinbrücke* there is "something replaced": the part of the word "brücke" (bridge) by the sign.

The reader will have noticed that there is a criterion running right through the examples below: the relationship between form and content.

Basically, every typogram can be produced in two ways: firstly, through the word sense (to interpret the meaning) and secondly, through the word picture (to take the formal data as the point of departure). It would need a second, a semantic box, to bring this within a system. Its components can be found in the examples given here.

Say: the solution for *National Zeitung* is the perception of a formal rotation, *Krupp* is a literary interpretation (Look back to the past, look forward to the future). In *Autokredit* the word credit (payment over a long term) is represented. In *Globotyper* the typeface suggests the typewriter and the projection suggests the sphere (it was originally a name for the IBM spherical head typewriter). "*Abfälle*" and "*wievoll?*" symbolize the idea, etc.

27

Abfälle

28

globotyper

29

wievoll?

30

AUTO AG

31

FH

32

RHEIN

## *Programme from the Far Middle Ages*

I pass the Cathedral every day on my way to work. The building contains some typical Gothic specialities. An example is provided by the pointed arches of the 15th century cloisters reproduced below: a perfect example of the joyful (and artful) way the Gothic designers went to work.

Joyful, because it gave them pleasure to create complicated patterns in profusion. Artful, because they tempered the complicity to the beholder and concealed the profusion. That is: none of the 16 windows (one is missing in the picture) is identical with another; simply because somebody wanted to have fun (a whim, perhaps, of the head artisan?) Each window is a design in itself based on an exact programme of constants and variants.

## The Programme:

The material and execution are prescribed; the dimensions, outlines, including the vertical tripartition up to the springing line of the arch.

There are 16 different ornamental patterns to be designed in the triangle of the arch and they must be related from the following points of view:

the profiles of the lines and the joining together of the bundles of lines are in principle all alike – the tracing of the lines must be adapted organically to the outline and also to the vertical tripartition – the lines meet either at right angles to each other (or to the periphery) or run into each other at 0 degrees – there must be no residual forms; that is, each line must form a self-contained pattern on two sides.



# Integral typography

A new label? The typographical aspect of a new *ism*? No, this is just what is not meant. The times of both, pioneers and *isms*, are over. After the adventurers of the 'teens and the twenties we are the settlers, the colonizers.

The continent of modern creation is not only discovered, but it already figures on various maps. *Isms* are the countries of the spiritual map, each one with a border separating it from the others as in a school geography – and like everything in school books right and wrong at the same time. For today the borderlines between *isms* are beginning to be obscured. And what interest us are not so much the surrounding constructions as the matter itself, the individual achievement which stands finally behind collective theories. In my opinion, for the sake of honesty, no new *ism* should be created<sup>1</sup>.

Today it is time (at any rate so it seems to me) to gain distance from the theses of the "new" and "elementary" typography of the twenties and the "functional" typography of the early forties.

Let us recapitulate these theses once again. Max Bill writes in 1946: "We call elementary typography a typography entirely developed out of its own data; that is to say, which works in an elementary way with basic typographical elements, and if, at the same time, it aims at the sentence-picture in such a way that it becomes a living sentence-organism without any decorative addition and without any strain, we would call it functional or organic typography. Which is to say that all demands – technical, economic, functional and aesthetic – should be fulfilled and should determine together the sentence-picture<sup>2</sup>."

It is precisely in typography that the difficulty of setting theoretical boundaries is plain<sup>3</sup>. For example discussing Bill's functional claim, Jan Tschichold, the editor of "Elementary Typography"<sup>4</sup> said even in 1928: "The New Typography is different from the earlier because it is the first to attempt the derivation of the appearance from the function of the text<sup>5</sup>." And Moholy Nagy even five years earlier: "This first of all: an unambiguous clarity in all typographical works. Legibility and communication should never suffer from a previously held aesthetic<sup>6</sup>."

Those were the theses which caused the typographical revolution and let loose discussion forty, twenty and even ten years ago. Today it can be said that they are no longer controversial; they are accepted – and thus they have lost their object, their currency. This is what is up to date in the situation of the new typography of 1959. After all a dream has been fulfilled, but the envisaged paradise has remained as far away as ever. In the twenties for instance it was claimed for the first time that the typographer should proceed from the data of his material, from the basic typographical elements; today it is hardly conceivable that he should not proceed from them.

If most of the pioneers' theses have become self-evident, the aesthetic criteria have been generally outlived. For example: Is sans serif or Roman type the type of the twentieth century (Tschichold 1928:

"Among all existing types the sans serif . . . is the only one which conforms spiritually to our time<sup>5</sup>)"? is symmetrical or asymmetrical typography the genuine, contemporary way of expression? do flush left, ragged right or flush left, flush right correspond to present-day feelings? can a type be set vertically or not? and so on.

Such "either or" criteria have served their time and their purpose. Today typographers use both sans serif and Roman type, set books both symmetrically and asymmetrically, use both flush left, ragged right and flush left, flush right. Today everything is stylistically allowable, allowable from the point of view of up-to-dateness. "There remain only open doors to be unlocked", as the German saying has it. And we shall not be spared the necessity of rendering an account of the state of our spiritual inheritance. Nobody will relieve us of the task of searching for new criteria.

Typography is an art not in spite of its serving a purpose but for that very reason. The designer's freedom lies not at the margin of a task but at its very centre. Only then is the typographer free to perform as an artist when he understands and ponders his task in all its parts. And every solution he finds on this basis will be an integral one, will achieve a unity between language and type, between content and form.

Integral means: shaped into a whole. There the Aristotelian dictum that the whole is greater than the sum of its parts is assumed. And this vitally concerns typography. Typography is the art of making a whole out of predetermined parts. The typographer "sets". He sets individual letters into words, words into sentences.

Letters are the elementary particles of the written language – and thus of typography. They are figurative signs for sounds without content, parts which acquire a meaning and a value only if they are combined. This means that combinations of two, three and more letters show in any case a word-picture, but definite letters render a definite idea only in a certain sequence; literally they constitute a word. To clarify the example from the other angle let us take four letters which can be combined in four different ways. From this we can see that only one combination makes sense. The 23 remaining are indeed both legible and pronounceable, they contain the same elements and give the same total. But they do not constitute a linguistic whole. They remain meaningless.

1	EFIW	FEIW	IEFW	WEFI
	EFWI	FEWI	IEWF	WEIF
	EIFW	FIEW	IFEW	WFEI
	EIWF	FIWE	IFWE	WFIE
	EWFI	FWEI	IWEF	WIEF
	EWIF	FWIE	IWFE	WIFE

The importance of the whole, the integral in general, for language and typography, is obvious. If the proportion between the correct and the possible combinations in words of four letters is 1: 24, in five-letter words it will be 1: 120, in six-letter words 1: 720, in seven-letter words 1: 5040 and so on.

This means that what we can write and set with our letters in all languages – if it makes sense, it makes a whole – always remains a mere fraction of the mathematical possibilities of the alphabet.

Morgenstern, the Dadaists, Schwitters and others have tried the abstract language which stands for nothing outside itself, consisting of unconventional combinations of sounds and letters, of words which are not words because they have no meaning but their own acoustic and visual rhythm<sup>7</sup>. The poets explode what has become natural and meaningless for us in the language. And in so doing they give us back a feeling for the natural and elementary. Kurt Schwitters' "Sonata in Primeval Sounds" is especially illuminating with respect to the accord between elementary, linguistic and typographical form.

The author says: "The Sonata consists of four movements, an introduction, a coda and a cadenza in the fourth movement. The first movement is a rondo in this text of the Sonata. It is rhythm in strong and weak, loud and soft, compressed and extended and so on."

Page 1 of the "Sonata in Primeval Sounds" published in Hannover in 1932. (Typography by Jan Tschichold):

In our contemporary reality abstract word-creations which seem at first sight the eccentric ideas of a poet, have developed into an everyday economic factor. Every day new words are created. Perhaps they grow out of abbreviations like UNO, are pieced together from foreign words like Ovomaltine, or are new inventions like Persil; in each case they are independent of their source. And now names for industrial products are found by means of electronic computers. This happens as follows: some three random vowels and four consonants are fed into the computer which registers in a few moments thousands of combinations (see above), replacing imagination by mechanical choice. These meaningless word-creations have become indispensable to publicity. The label departments of every firm of importance have dozens of them in stock; before the products exist the name is already registered and protected by law.

Elementary optics correspond to elementary speech sounds, the formal value of the type corresponds to the acoustic value of language. What Schwitters says about his "Sonata in Primeval Sounds", applies, if correspondingly modified, to the next example, an advertisement for the Delft Cable Works designed by Piet Zwart around 1928. It is a rhythm in black and white, large and small, compressed and extended.

2

**einleitung:**

Funms bo wo tsä zai Uu,  
pögiß, kwi Ee

Ooooooooooooooooooooooooooooo,

dli ttttt beeeee bö,  
dli ttttt beeeee bö funms bö,  
ttttt beeeee bö funms bö wo,  
beeeee bö funms bö wo tsä,  
bö funms bö wo tsä zai,  
funms bö wo tsä zai Uu

**erster teil:**

**theme 1:**  
Funms bo wo tsä zai Uu,  
pögiß, kwi Ee

**theme 2:**  
Dedcen an ttttt,  
li Ee,  
mpiff ttttt too,  
ttttt,  
jüü Kaa?  
(getrungeu)

**theme 3:**  
Rianzeke bee bee onz kti müü?  
zuuu enaze, zuuu rianzeke müü,  
rakete bee bee.

**theme 4:**  
Ruummpiff ttttt toooo?

157

3

NEDERLANDSCHE KABELFABRIEK • DELFT

10 - 25 - 50 KV 1000PANNINGKRACHTS NET PAPERISOLATIE - N.K.F. DELFT.

25'0



From the point of view of integral typography the illustration below is an interesting example of an influential experiment with fundamentals, though, as its author admits, an imperfect typographical achievement. It is a page of the first printing of Mallarmé's "Coup de dés", published in 1897 in the magazine *Cosmopolis*<sup>9</sup>.

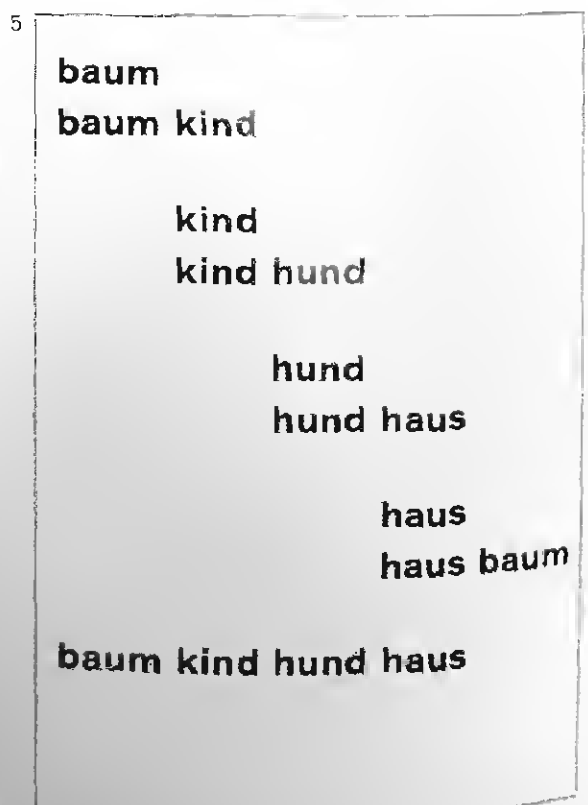
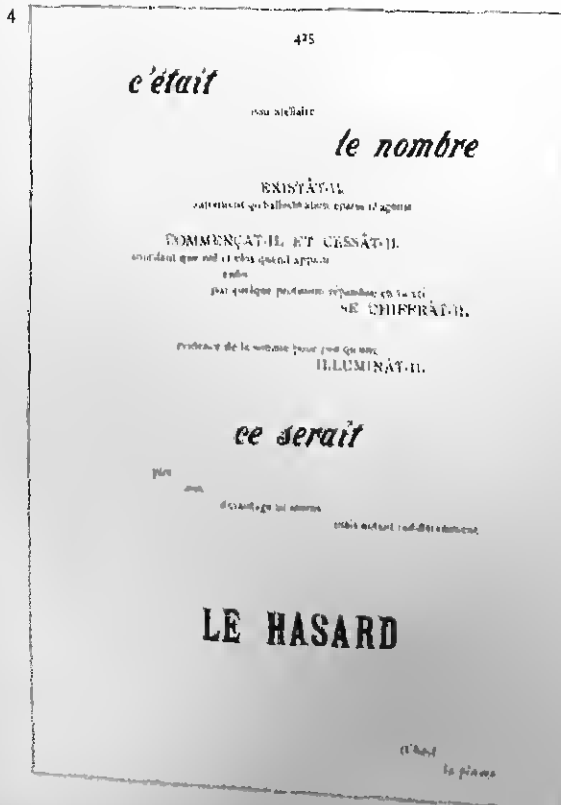
Paul Valéry writes on this<sup>9</sup>: "His (Mallarmé's) whole invention, derived from analyses performed for years on language, books and music, is based on the conception of the page as a visual unity. He had studied very carefully (even on posters and in newspapers) the effect resulting from the distribution of black and white and had compared the intensity of various types . . . He creates a surface reading which he combines with the lineal reading, thus enriching the domain of literature with a second dimension." And: "I believe the composition of the 'coup de dés' should not be considered as created in two distinct operations, the one consisting in writing a poem in the traditional way, independently of each visual form and the size of the spacing, the other in giving the text its appropriate setting. Mallarmé's attempt must necessarily have been more profound. It happens in the very moment of creation, it is itself a sort of creation."

Mallarmé himself writes in a letter to André Gide: "The poem has just been printed with my sentence-arrangement, in which the whole effect lies." It would not be possible to underline more clearly the relationship existing between the contents and the setting of the text.

If the Schwitters example is a composition of pure type-combinations, Mallarmé's is one of pure word-constellations<sup>10</sup>.

The author Eugen Gomringer says: "The constellation, the word-group, replaces the verse. Instead of syntax it is sufficient to allow two, three or more words to achieve their full effect. They seem on the surface without interrelation and sprinkled at random by a careless hand, but looked at more closely, they become the centre of a field of force and define a certain scope. In finding, selecting and putting down these words he creates 'thought-objects' and leaves the task of association to the reader, who becomes a collaborator and, in a sense, often the completer of the poem<sup>11</sup>." Further: "Silence distinguishes the new poetry . . . in this its prop is the word<sup>12</sup>."

Gomringer calls himself the "play-leader, the one who invites others to play with him". The words he puts down are not words applied to some subject, but a reality, conceptual and rhythmical values in themselves. They are again and again points in relationship to one another in a vacuum in which the reader's imagination wanders, rapidly or leisurely, according to his mood. And the less numerous the points of reference, the more precise they are – which means, in application to typography, the more fixed the unity of word and word-picture, the more natural it is. Lissitzky, addressing the reader, says as early as 1925: "You should demand that the writer take pains over the presentation, because his ideas come to you through the eye and not through the ear. Therefore typographical sculpture, through its visual quality, should do what the speaker's voice does for his thoughts<sup>13</sup>."



For instance how much is said and at the same time left unsaid in their contemporary context by the four words: Meg to wed court fotog; Princess marries photographer. A subject to excite the imagination of the reading millions. Sensation beyond the scope of normal print. Everyday speech is too elaborate for the headline, too space-consuming. A special solution, then. *Abbreviate* (fotog); draw upon the thesaurus (wed instead of marries); substitute nicknames (Meg for Margaret). We are interested by the fact that *the effect* here not only lies in the words, the content of their factual communication. Without any doubt the same words, if they, for example, stood somewhere in the middle pages, would have a completely different effect. Again content and presentation of the language result, cumulatively, in an entirely new unity.

We take for granted for instance that on the poster one does not read: "Allianz is organizing an exhibition in the Zurich Museum . . . and so on". The astonishing thing is: nothing is said of an exhibition! The text is reduced to the barest essentials, to names and dates scaled according to their significance – the rest is filled in by the onlooker. Or, in Gomringer's words: "The onlooker completes the poster". The information, though employing only type as its medium, is not as much read as "seen".

Here, using elementary means, the poster fulfils its function in an exemplary way, it conveys its message to the reader in the simplest possible manner, it literally puts him in the picture at the first glance – the information's content and form correspond to one another.

Poster by Max Bill, Zurich 1942:



Another phase of integral typography is illustrated by the following examples. The reader must imagine what is not shown on the illustrations. Each one is part of one folder for the New York Times, designed in 1958 by Louis Silverstein.

8

"The gravy train  
has stopped  
running! Let's see  
some  
**action!**"

10

"This is no  
time for  
**guess-  
work!**"

9

"Our  
advertising  
has to  
**produce!**"

11

"We've got  
to get out  
and  
**sell  
sell  
sell!**"

The mailer receives the prospectus with the figure 8 on the front. He unfolds it, 9, and with each following unfolding, 10 and 11, the size becomes twice as big, the text more insistent and the type heavier. After the dramatic climax "sell sell sell!", - there comes in conclusion the propaganda message - "Put the New York Times Magazine on your magazine schedules . . . use it consistently all year long".

With the elements so far accepted a new one is integrated. The reading-time becomes important, its rhythm is intensified, and it is incorporated into the typographical structure. One can say that text and typography develop simultaneously, as the paper is unfolded. (What is true here for unfolding a sheet of paper can as well be said of turning the pages of a book.)

Put The  
New York Times  
Magazine  
on your magazine  
schedules...use it consistently  
all year long

The New York Times folder shows the solution of a complex problem: it displays the integration of an idea, a text and typographical presentation through several phases. It would be a further task to integrate this type of folder with other advertising media or printed matter. Today more than ever, firms need not only a folder here, a poster or an advertisement there. Today something else is needed: a physiognomy, a public face.

The examples on these pages show the physiognomy of "Boîte à musique", a record shop in Basle. "Boîte à musique" has a signature and a style of its own – but not in the sense of an unchangeable mark or of a mere aesthetic principle. Rather do the elements, definitely established though adapted in every case to the functions and proportions, constitute the signature and style in one.

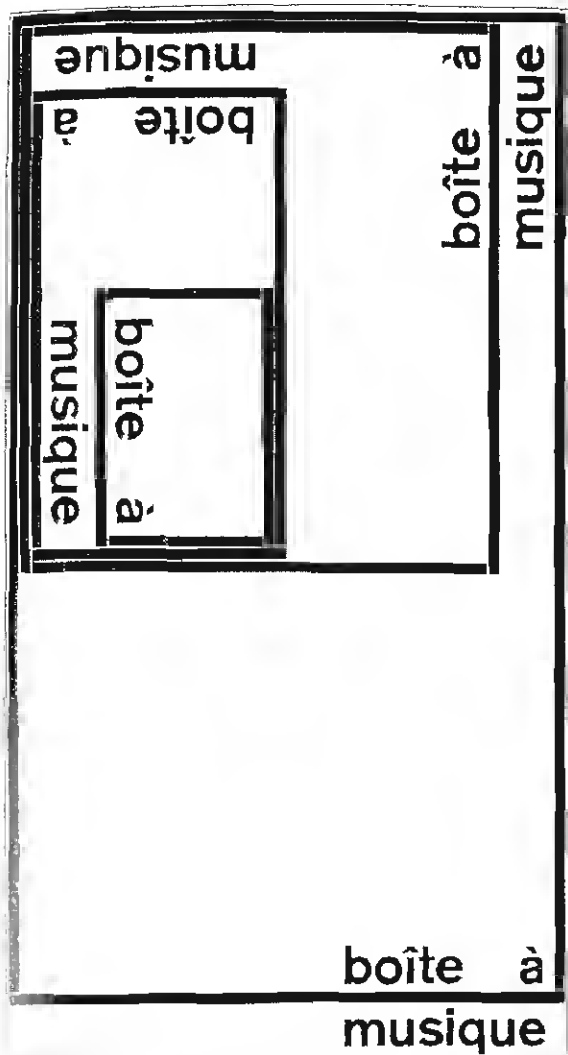
Fig. 13 shows the structure. The lettering and frame are fixed elements; so are the connection between them and the principle of variability. Starting from the bottom right corner, the frame can be increased upward or to the left by whole units at a time. There is no case which is pre-eminent for its proportions. There are only variants of equal value; and the variant is pre-eminent when it is best adapted to the particular problem awaiting solution.

Fig. 14 shows the New Year's card with variants embodying different proportions at one and the same time; 15 the notepaper, in which the insignia is adapted to the (given) DIN A 4 format; 16 and 17 advertisements tailored to fit the advertising space available; 18 a gift voucher.

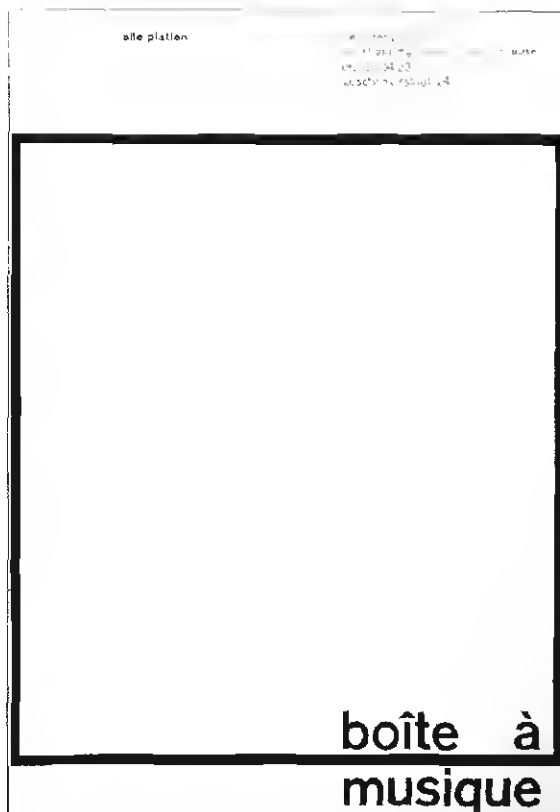
13



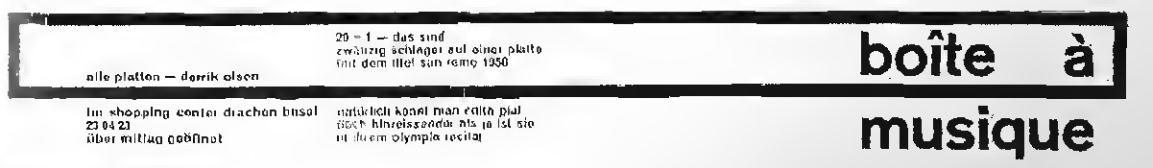
14



15



16



17



18



As an addition to Boîte à musique two other cases are quoted which may also be adduced as proof. What is to be shown is the ability of the principle to prove itself in practice; its general applicability first of all with various aids and secondly under various basic conditions.

In the case of Bech Electronic Centre the problem was different only in that the name involved quite different basic conditions. It answers the question Who? (Bech, the proprietor) What? (Electronics, the article) How? (Centre, the type of offer) A description, then, rather than a name; and under the disadvantage of comprising a great deal of text.

I must add that the name does not have this form, as many think, in order to oblige graphic artists. Just the opposite: the design is simply and solely a matter of discerning two characteristics of the name (basic conditions) which lend themselves to the system.

Firstly: the initial letters coincide in the manner of a crossword puzzle when the words are written together so as to read two ways. In other words: the name appears twice without actually being repeated. What appeared a handicap at first, is artificially intensified.

Secondly: the expanded form (horizontal and vertical) contains from the outset variants and combinations. Thus the sign, consisting solely of letters (and without additional aids like the frame in the case of Boîte à musique) can be adapted (within limits) to various proportional requirements. Moreover: through the combinatory variants, it suggests, although not actually interpreting, electronic technique.

Fig. 19 and 20 show the New Year's and also Introductory Card; 19 is the most condensed yet still identifiable form, 20 shows the full range of variability; 21 the firm's notepaper; 22 a repair slip with separable coupon.

19

**BECH  
ELEC  
CENT**

20

**BECH  
ELECTRONIC  
CENTRE**

**BECH  
ELECTRONIC  
CENTRE**

**BECH  
ELECTRONIC  
CENTRE**

**BEC  
ELECTRONIC  
CENTRE**

**BEC  
ELECTRONIC  
CENTRE**





# BECH ELECTRONIC CENTRE HCT TRE ONIC

Fig. 23 shows the poster in four colours with a sequence from yellow through blue-violet to red, following the movement from horizontal to vortical; 24-26 disc sleeves; 27 an advertisement in the daily press.

24



25



26



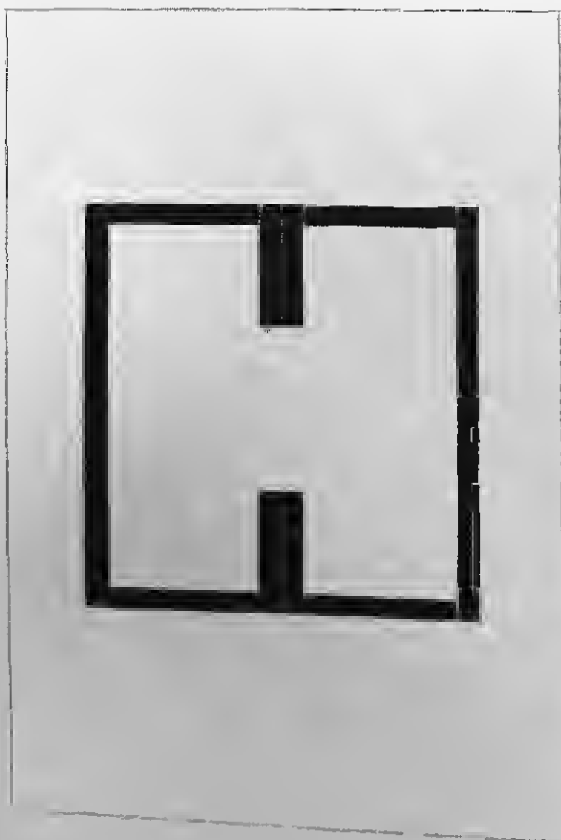
With both Boîte à musique and Bech the basic conditions are the same in the way they affect the problem: both are retail shops. In both cases the firm had to be characterized as such and given a physiognomy for the outside world.

In the case of Holzäpfel the structure had an additional task to perform: it had to characterize the products as well as the firm. In other words, a trademark had to be designed in the widest sense of the word.

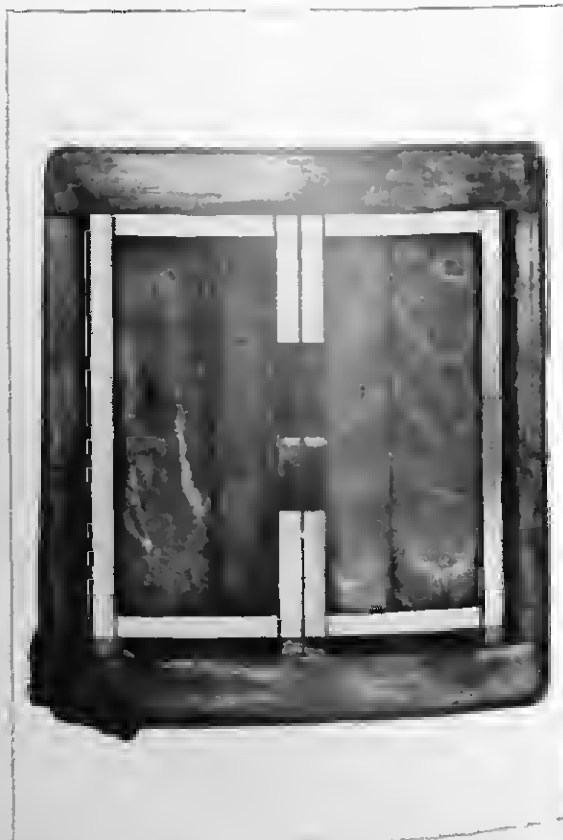
Vital question: can a mark be variable without at the same time forfeiting its mark-like character? Counter-question: what is typical about a mark, the proportion or the "configuration"? My answer is known: it is not and cannot be a question merely of proportions as such. Proportions can never be anything but good (or bad) relative to the task. But: in the structure of any sign, however great the number of variants, there is always one which must be declared to be the exemplar. The "configuration" must not suffer as a result of the variability; Fig. 28.

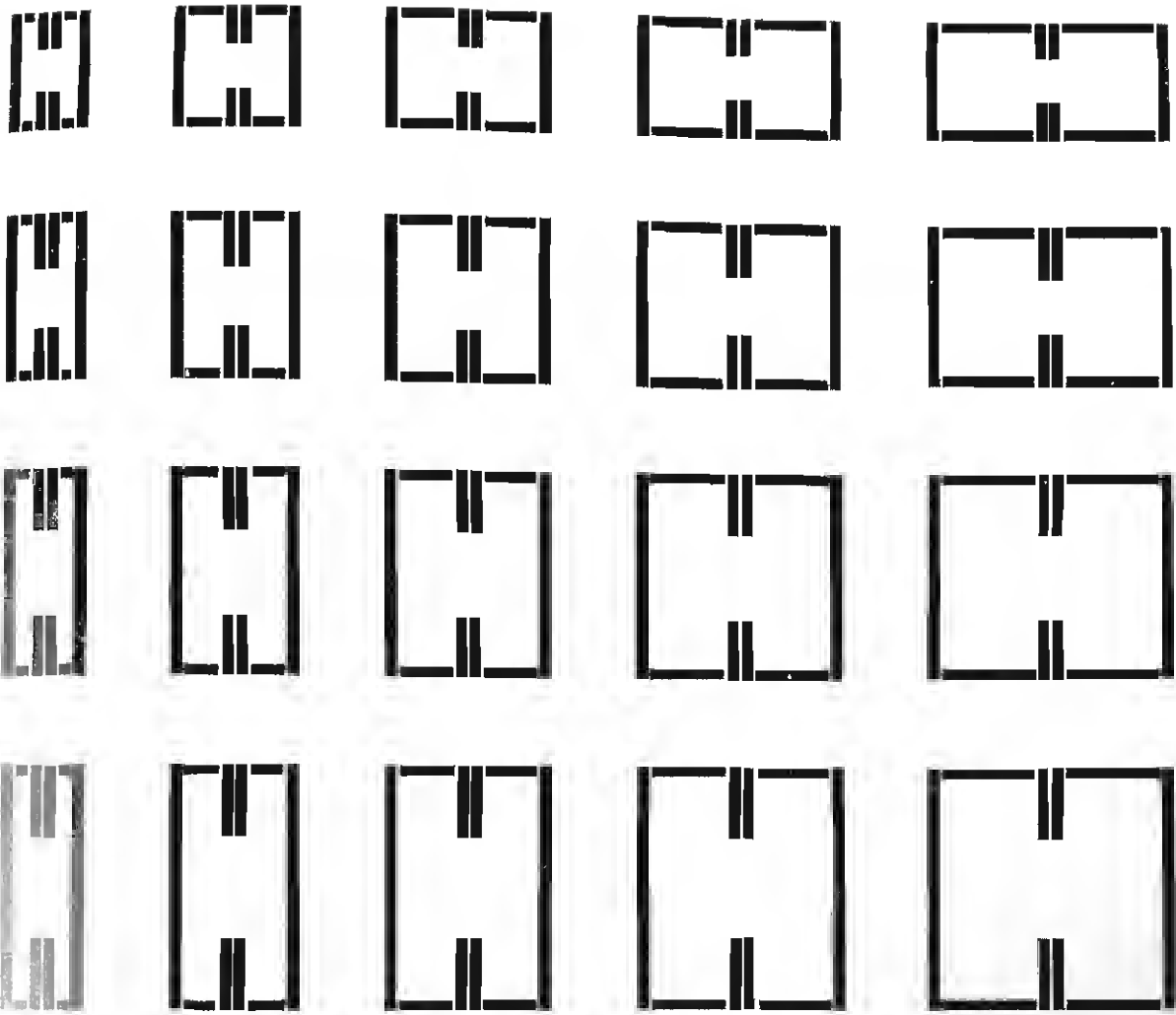
Fig. 29 shows the "printed frame". This characteristic is common to all examples: all consist of parts which are components of the case. There is an economic and also a disciplinary reason for this. Economic because otherwise originals would have to be drawn of every variant of the structure and blocks would have to be made of every size. Disciplinary because the typographical units simplify decisions as to proportion from the outset. Fig. 30 is a portion of the system. The thickness of line is the same in all the variants; the size, proportion and boldness are changed. Fig. 31 is a business form; 32 a dispatch label.

28




29





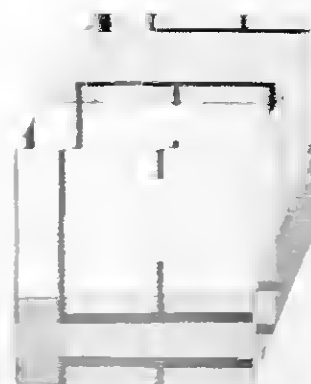
# PEN niedriger Schrank



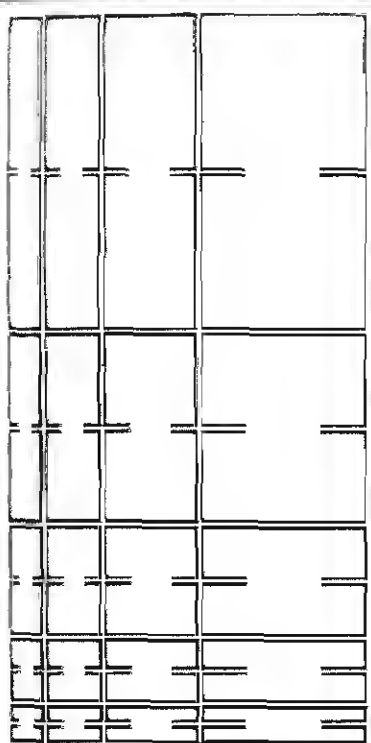


Holzäpfel

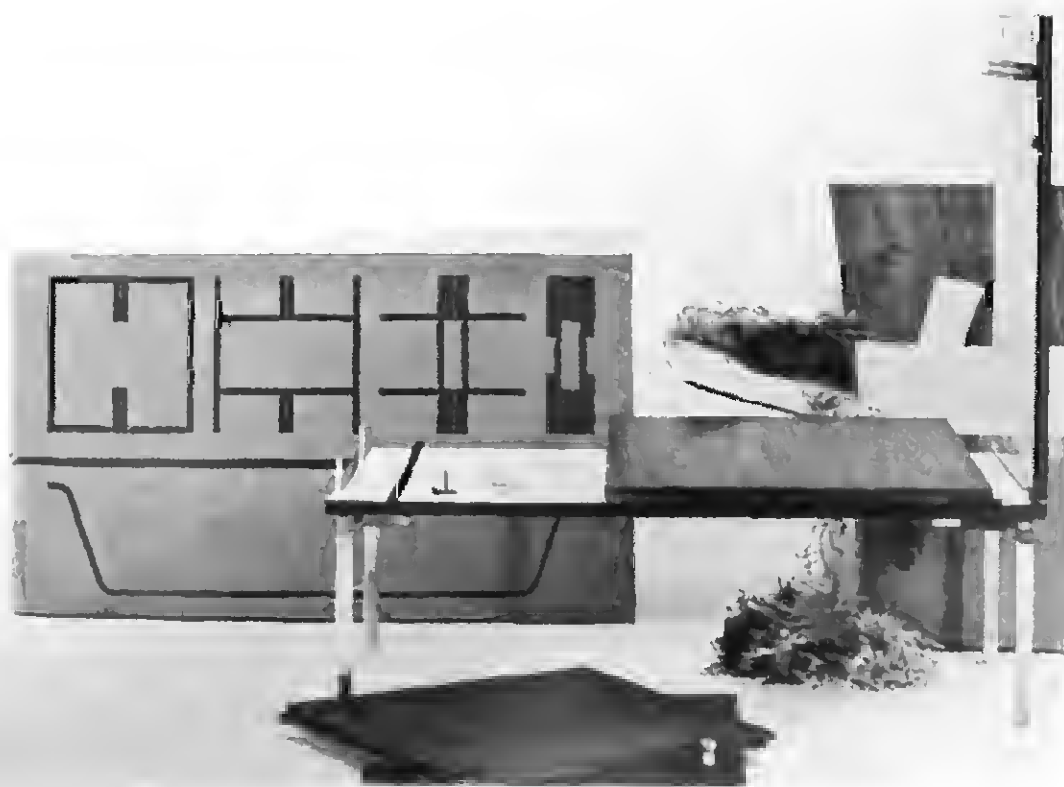
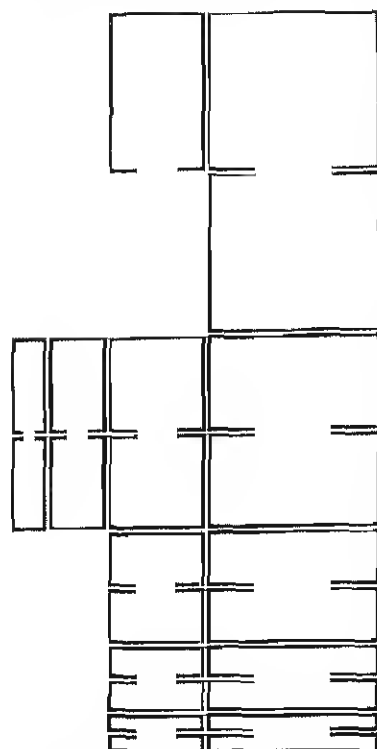
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Holzäpfel INwand die inwendige Wand in Bau und Haus und Innenraum



Montageanleitung INwand



Summarized:

1. Integral typography strives for the marriage of language and type resulting in a new unity, in a superior whole. Text and typography are not so much two consecutive processes on different levels as interpenetrating elements.
2. Unity is reached in different phases, each successor including its predecessor:
  - in the integration of different signs, different letters into the word. Examples 1 to 4
  - in the integration of different words into the sentence. Examples 5 to 8
  - in the integration of different sentences into the "reading-time" dimension. Examples 9 to 12
  - in the integration of independent problems and functions. Examples 13 to 39.

At the beginning I was rash enough to speak of "searching for new criteria". Has this article been productive of such? Some of the examples cited are old and have already become historic documents. The problems have already arisen and been solved. They have been solved in such a way that the results have remained fresh, living exemplars. Figure 7, the work of Max Bill, for example: If Allianz had to organize an exhibition again, today, twenty years later, the poster might be different but it could scarcely be more pertinent, better, more up to date.

As already said: In essentials these principles of "elementary" and "functional" typography are still valid and are observed to a very great extent. And new ones cannot be added where the solution of single problems is concerned.

However, today there are some changes: the production of printed matter has assumed unforeseen proportions. We are not only threatened by the danger of extravagance and superficiality where the individual creation, however excellent it may be, becomes lost, but also by the menace that the knowledge and experience of the pioneers, what has already been done and is generally recognized, will degenerate into mere formalism, become fashionable. The fulfilment of a dream threatens to become a nightmare. Here we are not allowed to resign. Here the designer must intervene, he must in a sense aim at a larger whole; he must not continue to carry out the single task so much as create structures from which single solutions can be derived.

This adds to the work of design a new dimension of planning, from the angle of both language and type.

The structure, once planned, always contains the elements of text and typography, always comprehends the whole and makes the single task possible. (Consider "Boite à musique": each task is always typical of the whole, bears the firm's image, and at the same time each is created in view of its special use, from the label to the poster). Thus work becomes more complex, and presupposes an intensified co-operation among all participants. But here design acquires meaning again. The greater effort and longer time dedicated to the development of the structure pays off in the end because it makes the detail work so much easier. And finally the new experience brings forth new impulses for the work on single tasks. In short: From the viewpoint of the whole structure, the integral design itself gains a new stability, a new up-to-dateness, a new significance in this age of short-lived production and corresponding waste of printed matter.

What I have tried to show on these pages cannot be a new typographical style. Because the "New Typography" was not an arbitrary fashion which has now served its purpose. It was the sweeping reform of our most important means of communication, the type face, in a period of sweeping changes. What we can and must do today is not change the inherited principles but extend them to new tasks. From the elementary, from the functional to the structural, the integral: this is the raw material for the new criteria.

<sup>1</sup> On the isms from 1914–1924 a book by Hans Arp and El Lissitzky appeared: "die Kunst-Ismen". Eugen Rentsch, Erlenbach 1925.

<sup>2</sup> From an essay, "über typographie", in "Schweizer Graphische Mitteilungen", May 1946.

<sup>3</sup> In other fields than typography the boundaries are more sharply drawn. Georg Schmidt, the apologist of functionalism, writes: "Dutch constructivism acted like a catalyst on architecture and on decorative arts and reduced house, furniture and utensil construction to the most elementary surface, body, space, and material tensions. The result was a much more direct relationship to material and construction in the field of house, furniture, and utensil construction, a complete renouncement of ornament and the discovery of the beauty of 'unornamented form' ". But: "Very soon one had to recognize that one had only slipped into a new formalism. Houses and furniture like this tried to be interesting constructivist sculptures and cared very little for actual use."

"Like every historical error this one was very salutary too. From it arose the further knowledge that house, furniture and utensils are not only conditioned by material and construction like a constructivist picture or a constructivist sculpture but even before this by the function." From an essay "Von der Beziehung zwischen Architektur und Malerei um 1920", in the magazine "Werk", July 1946.

<sup>4</sup> "Elementare Typographie" was the title of a special issue of the magazine "Typographische Mitteilungen" edited by Jan Tschichold in Berlin, October 1920.

<sup>5</sup> From "Die neue Typographie" by Jan Tschichold, Berlin 1928, Verlag des Bildungsverbandes der Deutschen Buchdrucker.

<sup>6</sup> From an essay "Die neue Typographie" from the book "Staatliches Bauhaus in Weimar 1919–1923", Bauhausverlag, Weimar-München 1923.

<sup>7</sup> "Die Galgenlieder" by Christian Morgenstern was first published in 1905 by Inselverlag. To the "Dada" creations in question belong above all Hugo Ball's "Lautgedichte", Hülsebeck's "Simultangedichte", Raoul Hausmann's phonetic poem "Imba" which inspired Schwitters, following Hans Bolliger's "Dada-Lexikon", to write his "Sonata in Primeval Sounds". The reader can learn more from the "Dada-Monographie" published by Willy Verkauf, Arthur Niggli, Teufen 1957 and from the "Anthologie des Absoluten" by Carola Giedion-Welcker, Benteli AG, Bern-Bümpliz 1946.

In a more restricted sense, i.e. rather as artificial than abstract poetry, mention should be made of the recent experimental texts of Max Bense. These texts are pro-

duced mechanically on a basis of aesthetic programming: "Bestandteile des Vorüber" and "Entwurf einer Rheinlandschaft"; both were published by Kiepenheuer and Witsch in Cologne. In 1962 the same publishers brought out Bense's "Theorie der Texte".

<sup>8</sup> An excellent edition of the "Coup de dés" was published in accordance with the last directions of the poet, who died in 1897, at the "Librairie Gallimard in "Editions de la Nouvelle Revue Française", Paris 1914. Also in 1897, another poet was giving thought to the typographical presentation of his work: Stefan George. At the "Verlag der Blätter für die Kunst" appeared "Das Jahr der Seele". The typographical design was by Melchior Lechner. In 1898 Arno Holz published the first "Phantasusheft". It contained fifty poems which were free of metrics, strophe, rhyme and were accentuated typographically by the fact that words which belong together rhythmically were always taken together in one line and the lines of most varying length were set on the central axis. A complete edition appeared at J. H. W. Dietz Nachfolger, Berlin 1925. In the following years the poets Apollinaire and Marinetti applied themselves intensely to typography. "Caligrammes" by Apollinaire was published by Gallimard, Paris 1925. Marinetti's principal work in this respect, "Les mots en liberté futurista", appeared at the "Edizione futurista di poesia", Milan 1919. Besides Schwitters, Käthe Steinitz and Theo van Doesburg ("Die Scheuche", Apossverlag, Hanover 1925) belong to the typographical poet revolutionists. An equally important work is the poetry volume written by Majakowsky and typographically designed by Lissitzky, "Dlja Gôlossa" (to be read aloud), Russian State Edition, Moscow 1923. And so on. A more recent publication in this field is "Les Epiphanies" by Henri Pichette whose typography was designed by Pierre Lefaucheux and appeared 1943 at "l'éditeur", Paris. And I may also mention in this ancestors' gallery the novel "Schiff nach Europa" by Markus Kutter, which I organized visually and which was published by Arthur Niggli, Teufen 1957.

<sup>9</sup> From the essay on Stéphane Mallarmé in "Variété 11", Gallimard, Paris 1930.

<sup>10</sup> From "Konstellationen", poetry volume in four languages, Spiral Press, Berne 1953.

<sup>11</sup> From an article in "Neue Zürcher Zeitung", September 1954, on the page "Young Swiss Authors answer".

<sup>12</sup> From an essay "vom vers zur konstellation, zweck und form einer neuen dichtung", in the magazine "Spirale", No. 5, Spiral Press, Stadion Wankdorf, Berne 1955. "Spirale" publishes in each number authors spiritually related to Gomringer such as Augusto de Campos, Helmut Holssonbützel, Déclé Pignatari and so on. Furthermore Daniel Spoerri publishes a magazine in Darmstadt which counts among its collaborators the same authors as "Spirale". In 1959 there appeared in Sao Paulo at Editora Kos-



mos a volume of constellations, "Poemas", by Theon Spanudis. The subject of the Integration of Typography in Literature has been treated in numerous recent publications. Mention may be made of: the catalogue of the exhibition, "Schrift und Bild" held in Amsterdam and Baden Baden, 1963; the "Konkrete Poesie" series, published by Eugen Gomringer himself; Gomringer's own "Konstellationen" collection, likewise published in Frauenfeld; Markus Kutter's "Inventar mit 35", brought out in 1961 by Arthur Niggli; "oddities and curiosities" a delightful collection by C. C. Bombaugh, published in 1961 by Martin Gardner at Dover Publication Inc. New York.

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From an article "Typographische Tatsachen" in the "Gutenberg-Festschrift", Gutenberg-Gesellschaft, Mainz 1925.

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In another sense André Breton had already made poetical capital out of this knowledge. With headlines and headline-fragments cut out of newspapers he mounted a "Poème" which appeared in "Manifeste du Surréalisme", Paris 1924. (Published in "Antologia del Surrealismo" by Carlo Bo, Edizione di Uomo, Milan 1946.)

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